



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/771,979

02/04/2004

Paul A. Rhea

60046.0027USU1

3582

23552

7590

11/10/2005

MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER

TSAI, CAROL S W

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/771,979

Applicant(s)

RHEA ET AL.

Examiner

Carol S. Tsai

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-16 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 7, and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by U. S. Patent No. 6,591,010 to Russin.

With respect to claims 1 and 4, Russin discloses a method for automatically testing the video display functionality of a computer video card, comprising: storing a first computer displayable image in a first memory context (see col. 5, lines 26-29); passing the image through a computer video card for displaying on a computer display monitor (see Fig. 1 and col. 3, lines 25-40 and col. 5, lines 23-25 and lines 29-32); displaying the image on the computer display monitor (see Figs. 1 and 5 and col. 3, lines 41-43); capturing the displayed image and storing the captured displayed image to a second memory context (col. 5, line 29 to col. 6, line 50); comparing the first stored image to the second stored image to determine whether the second stored image is substantially the same as the first stored image after the first image is displayed on the computer display monitor; and if the first stored image is not substantially the same as the second stored image, designating the computer video card as failing a video test (see Abstract, lines 12-18; col. 4, lines 42-50; and col. 6, line 51 to col. 7, line 35).

As to claim 2, Russin also discloses generating a bitmap of the first computer displayable image for storing in the first memory context (see col. 10, lines 56-57).

As to claim 3, Russin also discloses comparing the first stored image to the second stored image on a pixel-by-pixel basis (see Abstract, lines 6-8 and col. 6, lines 22-23).

As to claim 5, Russin also discloses designating the computer video card as passing the video test if less than a threshold number of pixels of the first stored image is different than the second stored image (see col. 6, lines 53-63).

As to claim 7, Russin also discloses the first computer displayable image being a simple pattern image (see Fig. 1).

As to claim 9, Russin also discloses the first computer displayable image being a three dimensional image (see Abstract, lines 12-18 and col. 5, line 35 to col. 6, line 21).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,591,010 to Russin in view of U. S. Publication No. 2003/0200078 to Luo et al.

As to claim 8, Russin discloses the claimed invention, except for displayed image being a text screen.

Luo et al. teach image data displayed being a text string (see Fig. 2A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Russin's method to include image data displayed being a text string, as taught by Luo et al., in order that text string can be displayed for testing video hardware and software.

As to claim 10, Russin discloses a method for automatically testing the video display functionality of a computer video card, comprising: generating a bitmap of the first computer displayable image for storing in the first memory context (see col. 5, lines 26-29 and col. 10, lines 56-57); capturing the displayed image and storing the captured displayed image to a second memory location (col. 5, line 29 to col. 6, line 50); comparing the first stored image to the second stored image to determine whether the second stored image is substantially the same as the first stored image after the first image is displayed on the computer display monitor; and if the first stored image is not substantially the same as the second stored image, designating the computer video card as failing a video test (see Abstract, lines 12-18 and col. 6, line 51 to col. 7, line 35).

Russin does not disclose image data displayed being a text string.

Luo et al. teach image data displayed being a text string (see Fig. 2A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Russin's method to include image data displayed being a text string, as taught by Luo et al., in order that text string can be displayed for testing video hardware and software.

As to claim 11, Russin also discloses comparing the first stored image to the second stored image on a pixel-by-pixel basis (see Abstract, lines 6-8).

Art Unit: 2857

As to claim 12, Russin also discloses designating the computer video card as failing the video test (see col. 4, lines 42-50 and col. 6, lines 22-23).

5. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,591,010 to Russin in view of U. S. Publication No. 2004/0227751 to Anders.

As to claim 13, Russin discloses a method for automatically testing the video display functionality of a computer video card, comprising: displaying a three dimensional image on a computer display monitor according to a first display orientation (see Abstract, lines 12-18 and col. 5, line 35 to col. 6, line 21); capturing the three dimensional image displayed according to a first display orientation and storing the captured three dimensional image to a memory location (see col. 5, line 29 to col. 6, line 50); comparing one or more selected pixels of the stored captured three dimensional image to a known color range for the one or more selected pixels; and if a color of the one or more selected pixels does not fall within the known color range for the one or more selected pixels, designating the computer video card as failing the video test (see Abstract, lines 12-18 and col. 6, line 51 to col. 7, line 35).

Russin does not disclose rotating the three dimensional image on the computer display monitor to a second display orientation.

Anders teaches rotating the three dimensional image on the computer display monitor to a second display orientation (see paragraph 0019).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Russin's method to include rotating the three dimensional image

Art Unit: 2857

on the computer display monitor to a second display orientation, as taught by Anders, in order that a three-dimensional image can be generated for testing video hardware and software.

As to claim 14, Russin also discloses comparing the first stored image to the second stored image on a pixel-by-pixel basis (see Abstract, lines 6-8 and col. 6, lines 22-23).

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,591,010 to Russin in view of U. S. Patent No. 6,580,466 to Siefken.

As to claims 15 and 16, Russin discloses a method for automatically testing an image file, comprising: displaying frames of the image file on a computer display monitor and copying one of the displayed frames as a test frame to a bitmap file in a first memory context (see col. 5, lines 26-29 and col. 10, lines 56-57); displaying the bitmap file on the computer display monitor (see Figs. 1 and 5 and col. 3, lines 41-43); capturing the displayed bitmap file and storing the captured displayed bitmap file to a second memory context (see col. 5, line 29 to col. 6, line 50); comparing the captured displayed bitmap file in the second memory context to the bitmap file copied to the first memory context on a pixel-by-pixel basis; if any pixel of the bitmap file copied to the first memory context is different from a corresponding pixel of the bitmap file stored in the second memory context, designating the image file as failing a video test (see Abstract, lines 12-18 and col. 6, line 51 to col. 7, line 35).

Russin does not disclose the image file being an audio video interleaved (AVI) file.

Siefken teaches an audio video interleaved (AVI) file (see col. 8, line 57 to col. 9 line 8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Russin's method to include an audio video interleaved (AVI) file,

Art Unit: 2857

as taught by Siefken, in order that a sound and motion picture file that conforms to Microsoft corporation's WINDOWS<sup>TM</sup> Resource Interchange can be displayed for testing video hardware and software.

*Allowable Subject Matter*

7. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Contact Information*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-2224.

The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR



Art Unit: 2857

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

cswt  
November 8, 2005



Carol S. W. Tsai  
Primary Examiner  
Art Unit 2857